

individually added to independent claims, or added as dependent claims to further define an invention being claimed by those respective dependent claims should they be written.

[0326] In view of the teachings herein, many further embodiments, alternatives in design and uses of the embodiments of the instant invention will be apparent to those of skill in the art. As such, it is not intended that the invention be limited to the particular illustrative embodiments, alternatives, and uses described above but instead that it be solely limited by the claims presented hereafter.

1-27. (canceled)

28. A method for conductively thermal processing a food ingredient comprising:

- (a) providing a base configured to implement a thermal process selected from the group consisting of: (1) heating, and (2) cooling, wherein the base also comprises air passages and a first surface;
- (b) providing a thermally conductive thin sheet of material comprising second and third surfaces;
- (c) relatively positioning the base and thin sheet wherein the first and second surfaces are in proximity to one another;
- (d) at least partially evacuating the space between the first and second surfaces via the air passages whereby the thin sheet conforms to the base and conductive thermal contact between the first and second surfaces is obtained;
- (e) changing a temperature of the base and thereby changing the temperature of the third surface; and
- (f) introducing the food ingredient against the third surface;

whereby the food ingredient is conductively thermally processed through the sheet without direct contact between the food ingredient and the base.

29. The method of claim 28 wherein the base comprises a heating element.

30. The method of claim 28 wherein at least a portion of the first surface is concave.

31. The method of claim 28 further comprising at least partially reintroducing air between first and second surfaces.

32. The method of claim 28 wherein the sheet is a metal foil.

33. The method of claim 28 wherein the sheet is shaped similarly to the adjacent shape of the base.

34. The method of claim 28 wherein the sheet is used for thermal processing during preparation of a single meal or a single type of food.

35. The method of claim 28 wherein the thermal processing is selected from the group consisting of 1) heating, 2) cooling, 3) freezing, 4) boiling, 5) evaporating, and 6) dehydrating.

36. The method of claim 28 further comprising providing a programmed control system for controlling operation of the thermal processing, the control system comprising one or more elements selected from the group consisting of: (1) one or more general purpose computers, (2) one or more special purpose computers, (3) one or more programmable automation controllers, (4) one or more embedded controllers, (5) one or more programmable array logic devices, (6) one or more application specific integrated circuits, (7) one or more field programmable gate arrays, (8) any other device or devices capable of processing and manipulating electrical signals, (9) one or more actuators, (10) one or more mem-

ories or storage devices for programs, (11) one or more memories or storage devices for data, (12) one or more control actuators, (13) one or more voice coils, (14) one or more solenoids, (15) one or more user interfaces, e.g. a touch screen, (16) one or more sensors, and (17) one or more network connections;

wherein the control system controls at least one operation selected from the group consisting of i) operation (a) of claim 18, (ii) operation (b) of claim 18, (iii) operation (c) of claim 18, iv) operation (d) of claim 18, v) operation (e) of claim 18, and vi) operation (f) of claim 18.

37. A method for automatically transferring at least one food ingredient within at least one sealed flexible package to a receptacle, comprising:

- (a) providing a sealed flexible package comprising at least one film that comprises at least two inner film surfaces that face one another as well as corresponding opposite facing external surfaces with at least one food ingredient sealed between the two inner film surfaces, wherein a seal is formed by direct or indirect adhesion of portions of the inner film surfaces to one another such that the at least one food ingredient is encapsulated by the sealed inner film surfaces, wherein the sealing of the inner film surfaces comprises a first seal region;

(b) providing an ingredient dispensing system, comprising:

- (i) a grasping mechanism selected from the group consisting of: (1) a vacuum grasper, (2) a mechanical clamp, (3) a mechanical gripper, and (4) a take-up roller;

(ii) a programmed control system for controlling operation of the grasping mechanism, the control system comprising one or more elements selected from the group consisting of: (1) one or more general purpose computers, (2) one or more special purpose computers, (3) one or more programmable automation controllers, (4) one or more embedded controllers, (5) one or more programmable array logic devices, (6) one or more application specific integrated circuits, (7) one or more field programmable gate arrays, (8) any other device or devices capable of processing and manipulating electrical signals, (9) one or more actuators, (10) one or more memories or storage devices for programs, (11) one or more memories or storage devices for data, (12) one or more control actuators, (13) one or more voice coils, (14) one or more solenoids, (15) one or more user interfaces, e.g. a touch screen, (16) one or more sensors, and (17) one or more network connections;

(c) grasping the at least one film using the grasping mechanism; and

(d) automatically operating the grasping mechanism, under the control of the control system to unseal the first seal region, wherein the unsealing occurs by a method selected from the group consisting (1) moving the adhered inner surfaces in the first seal region away from one another to break the seal and open the flexible package, (2) peeling the adhered inner-facing surfaces in the first seal region from one another using the grasping mechanism to break the seal and unseal the flexible package, and (3) while grasping an extension portion of the at least one film that extends past the seal,